

REMARKS

This is in response to the Office Action mailed July 20, 2004, in which the Examiner rejected claims 1-22. With this Amendment, Applicant has amended claims 1-5, 7, 10-12, 15 and 22, canceled claims 14 and 19, and added new claim 23. Entrance of the amendments and reconsideration of the application is respectfully requested.

SUMMARY OF EXAMINER INTERVIEW

On September 22, 2004, Applicant's representative, Brian D. Kaul, had a telephone interview with Examiner Chan Park and the Examiner's supervisor Edward Coles. During the interview, the rejections of several of the claims were discussed. No resolution of the rejections was reached.

OVERVIEW OF CLAIM AMENDMENTS

With regard to independent claim 1, the amendment generally adds the limitations set forth in previously pending claim 14 (now cancelled), and deletes elements (c)-(f), which are now provided in new claim 23. Likewise, claim 15 has been amended to include the elements previously presented in claim 19 (now canceled). Also, independent claim 22 also includes the same limitations that were set forth in claims 14 and 19.

CLAIM REJECTIONS - 35 U.S.C. §103

In the Office Action, the Examiner rejected claims 1-7, 10-13, 15-18 and 20-22 under 35 U.S.C. §103(a) as being unpatentable over Owa et al. (U.S. Patent No. 6,348,971) in view of Bradshaw et al. (U.S. Patent No. 6,264,295). Applicant respectfully disagrees with the Examiner's assessment of the cited references.

Independent claims 1, 15 and 22 each include steps or instruction relating to determining or estimating a requested print consumable amount that is defined as an amount of print consumable that is needed to render the print job . . . wherein the print consumable is selected from a group consisting of ink, toner, colored dye ribbon, and wax based ribbon. The Examiner has interpreted the claimed "print consumable" as covering a print medium on which the image is to be printed, such as the paper in Owa et al. However, nowhere in the specification of the present application is the claimed "print consumable" described as relating to such a print medium. Rather, the claimed "print consumable" is consistently described as relating to the print material used to render or print an image. See for example, page 6, lines 21-23, and page 7, lines 23-26. Accordingly, when read in light of the specification, a reasonable interpretation of the meaning of "print consumable" is the material used to print an image onto a print medium, rather than a print medium. However, in an effort to expedite the prosecution of the present application, Applicant has amended independent claims 1, 15 and 22, to describe the print consumable with greater specificity in order to avoid future claim language misinterpretation.

The cited references fail to disclose the elements described above in independent claims 1, 15 and 22. In particular, neither Owa et al. or Bradshaw et al. disclose or suggest a determination of a requested print consumable amount that is required to render the print job, as claimed. Additionally, none of the cited references disclose or suggest that that requested print consumable amount is estimated or determined "before rendering of the print job begins" (claims 1 and 22) or "before rendering of the image file begins" (claim 15).

Furthermore, Springett (U.S. Patent No. 5,636,032), which was cited by the Examiner as teaching elements of claims 14 and

19, also fails to disclose such elements.

In particular, Springett only calculates a historical average amount of the print consumable (i.e., marking material) that has been applied to previously rendered pages, rather than the print consumable amount that is needed to render a present print job. As a result, Springett only provides a calculation of the expected number of pages that the remaining print consumable can render, rather than an expected number of pages that can be rendered of a particular print job. As a result, the expected number of pages calculated by Springett may be much higher, or lower, than the actual number of pages of a present print job that can be printed with the remaining print consumable amount.

Although Springett discusses the calculation of the use of print consumable while a print job is being rendered, such a calculation is irrelevant to the present invention, since the estimation or determination of the requested print consumable amount takes place prior to the rendering of the print job. The timing of the determination of the requested print consumable amount is significant. In particular, one purpose of the present invention is to be able to notify the user of the printing device, prior to the commencement of the rendering of the print job, whether there is an insufficient amount of print consumable remaining to completely render the print job. As a result, the present invention can give the user an opportunity to either replenish the print consumable, modify the print job, or cancel the print job entirely, prior to beginning the rendering of the print job. Such an opportunity cannot be provided to the user of the Springett device, since the amount of print consumable used by the print job is not established until the rendering has been completed.

Accordingly, the combination of Owa et al., Bradshaw et al. and Springett fail to disclose or suggest the present

invention as described in independent claims 1, 15 and 22.

CONCLUSION

In light of the discussion above, Applicant submits that independent claims 1, 15 and 22 are presently in condition for allowance. Additionally, Applicant submits that all claims depending from independent claims 1, 15 and 22 are allowable as being dependent from allowable base claims, and request that the rejections be withdrawn. Reconsideration and favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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